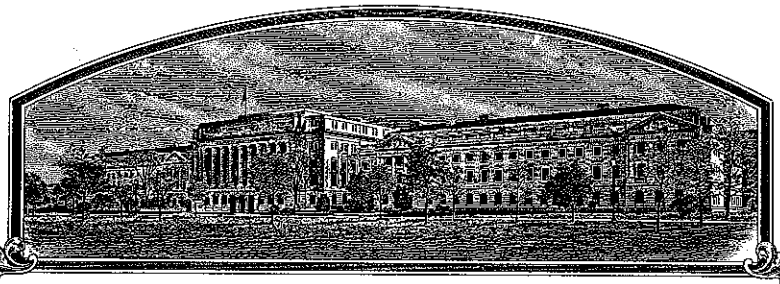
No. 200200171



THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

University of Georgia Research Foundation, Inc.

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSE, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSE, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT. IN THE UNITED STATES SEED OF THIS VARIETY (1) MAY BE SOLD BY VARIETY NAME ONLY AS A CLASS OF CERTIFIED SEED AND (2) SHALL CONFORM TO THE NUMBER OF GENERATIONS SPECIFIED BY THE OWNER OF THE RIGHTS. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

PEANUT

'Georgia-01R'

In Testimony Whereof, *I have hereunto set my hand and caused the seal of the* Plant Variety Protection Office *to be affixed at the City of Washington, D.C. this fifteenth day of June, in the year two thousand and five.*

Attest:

Commissioner
Plant Variety Protection Office
Agricultural Marketing Service

Secretary of Agriculture

REPRODUCE LOCALLY. *Include form number and date on all reproductions*

Form Approved - OMB No. 0581-0055

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY - PLANT VARIETY PROTECTION OFFICE

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

(Instructions and information collection burden statement on reverse)

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

1. NAME OF OWNER
University of Georgia Research Foundation, Inc.

2. TEMPORARY DESIGNATION OR EXPERIMENTAL NAME
GA 942511

3. VARIETY NAME
Georgia-01R

4. ADDRESS *(Street and No., or R.F.D. No., City, State, and ZIP Code, and Country)*
Boyd Graduate Studies Research Center
Athens, GA 30602-7411

5. TELEPHONE *(Include area code)*
(706) 542-4750

6. FAX *(Include area code)*
(706) 583-0074

FOR OFFICIAL USE ONLY

PVPO NUMBER
200200171

FILING DATE
June 6, 2002

7. IF THE OWNER NAMED IS NOT A "PERSON", GIVE FORM OF ORGANIZATION *(corporation, partnership, association, etc.)*
Corporation

8. IF INCORPORATED, GIVE STATE OF INCORPORATION
Georgia

9. DATE OF INCORPORATION
Nov. 17, 1978

10. NAME AND ADDRESS OF OWNER REPRESENTATIVE(S) TO SERVE IN THIS APPLICATION. *(First person listed will receive all papers)*
Dr. John Ingle
University of Georgia Research Foundation, Inc.
Boyd Graduate Studies Research Center
Athens, GA 30602-7411

FEES RECEIVED

FILING AND EXAMINATION FEES:
$ 2705 —
DATE 6/6/2002

CERTIFICATION FEE:
$ 432.00
DATE 4-7-2005

11. TELEPHONE *(Include area code)*
(706) 542-4750

12. FAX *(Include area code)*
(706) 583-0074

13. E-MAIL
ji@ovpr.uga.edu

14. CROP KIND *(Common Name)*
Peanut

15. GENUS AND SPECIES NAME OF CROP
Arachis hypogaea L. subsp. hypogaea var. hypogaea

16. FAMILY NAME *(Botanical)*
Leguminosae (Fabaceae)

17. IS THE VARIETY A FIRST GENERATION HYBRID?
☐ YES ☒ NO

18. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (Follow instructions on reverse)

- a. ☒ Exhibit A. Origin and Breeding History of the Variety
- b. ☒ Exhibit B. Statement of Distinctness
- c. ☒ Exhibit C. Objective Description of Variety
- d. ☒ Exhibit D. Additional Description of the Variety *(Optional)*
- e. ☒ Exhibit E. Statement of the Basis of the Owner's Ownership
- f. ☒ Voucher Sample *(2,500 viable untreated seeds or, for tuber propagated varieties, verification that tissue culture will be deposited and maintained in an approved public repository)* Mailed: 2/4/02
- g. ☒ Filing and Examination Fee ($2,705), made payable to "Treasurer of the United States" *(Mail to the Plant Variety Protection Office)*

19. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE SOLD AS A CLASS OF CERTIFIED SEED? *See Section 83(a) of the Plant Variety Protection Act)*
☒ YES *(If "yes", answer items 20 and 21 below)* ☐ NO *(If "no", go to item 22)*

20. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF CLASSES? ☒ YES ☐ NO
IF YES, WHICH CLASSES? ☒ FOUNDATION ☒ REGISTERED ☒ CERTIFIED

21. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS? ☐ YES ☒ NO
IF YES, SPECIFY THE NUMBER 1,2,3, *etc.* ☐ FOUNDATION ☐ REGISTERED ☐ CERTIFIED
(If additional explanation is necessary, please use the space indicated on the reverse.)

22. HAS THE VARIETY (INCLUDING ANY HARVESTED MATERIAL) OR A HYBRID PRODUCED FROM THIS VARIETY BEEN SOLD, DISPOSED OF, TRANSFERRED, OR USED IN THE U. S. OR OTHER COUNTRIES?
☐ YES ☒ NO
IF YES, YOU MUST PROVIDE THE DATE OF FIRST SALE, DISPOSITION, TRANSFER, OR USE FOR EACH COUNTRY AND THE CIRCUMSTANCES. *(Please use space indicated on reverse.)*

23. IS THE VARIETY OR ANY COMPONENT OF THE VARIETY PROTECTED BY INTELLECTUAL PROPERTY RIGHT *(PLANT BREEDER'S RIGHT OR PATENT)*?
☐ YES ☒ NO
IF YES, PLEASE GIVE COUNTRY, DATE OF FILING OR ISSUANCE AND ASSIGNED REFERENCE NUMBER. *(Please use space indicated on reverse.)*

24. The owners declare that a viable sample of basic seed of the variety will be furnished with application and will be replenished upon request in accordance with such regulations as may be applicable, or for a tuber propagated variety a tissue culture will be deposited in a public repository and maintained for the duration of the certificate.

The undersigned owner(s) is(are) the owner of this sexually reproduced or tuber propagated plant variety, and believe(s) that the variety is new, distinct, uniform, and stable as required in Section 42, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act.

Owner(s) is(are) informed that false representation herein can jeopardize protection and result in penalties.

SIGNATURE OF OWNER
Gordhan L. Patel

NAME *(Please print or type)*
Gordhan L. Patel

CAPACITY OR TITLE
Executive Vice President

DATE 6/3/02

SIGNATURE OF OWNER

NAME *(Please print or type)*

CAPACITY OR TITLE

DATE

S&T-470 (04-01) designed by the Plant Variety Protection Office with WordPerfect 6.0a. Replaces STD-470 (02-99) which is obsolete. *(See reverse for instructions and information collection burden statement)*

INSTRUCTIONS

GENERAL: To be effectively filed with the Plant Variety Protection Office (PVPO), **ALL** of the following items must be **received** in the PVPO: (1) Completed application form signed by the owner; (2) completed exhibits A, B, C, E; (3) for a seed reproduced variety at least 2,500 viable untreated seeds, for a hybrid variety at least 2,500 untreated seeds of each line necessary to reproduce the variety, or for tuber reproduced varieties verification that a viable *(in the sense that it will reproduce an entire plant)* tissue culture will be deposited and maintained in an approved public repository; (4) check drawn on a U.S. bank for $2,705 ($320 filing fee and $2,385 examination fee), payable to "Treasurer of the United States" *(See Section 97.6 of the Regulations and Rules of Practice.)* Partial applications will be held in the PVPO for not more than 90 days, then returned to the applicant as unfiled. Mail application and other requirements to Plant Variety Protection Office, AMS, USDA, Room 500, NAL Building, 10301 Baltimore Avenue, Beltsville, MD 20705-2351. Retain one copy for your files. All items on the face of the application are self explanatory unless noted below. Corrections on the application form and exhibits must be initialed and dated. **DO NOT** use masking materials to make corrections. If a certificate is allowed, you will be requested to send a check payable to "Treasurer of the United States" in the amount of $320 for issuance of the certificate. Certificates will be issued to owner, not licensee or agent.

Plant Variety Protection Office
Telephone: (301) 504-5518
FAX: (301) 504-5291
Homepage: http://www.ams.usda.gov/science/pvpo/pvp.htm

ITEM

18a. Give:
(1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method;
(2) the details of subsequent stages of selection and multiplication;
(3) evidence of uniformity and stability; and
(4) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified

18b. Give a summary of the variety's distinctness. Clearly state how this application variety may be distinguished from all other varieties in the same crop. If the new variety is most similar to one variety or a group of related varieties:

(1) identify these varieties and state all differences objectively;
(2) attach statistical data for characters expressed numerically and demonstrate that these are clear differences; and
(3) submit, if helpful, seed and plant specimens or photographs (prints) of seed and plant comparisons which clearly indicate distinctness.

18c. Exhibit C forms are available from the PVPO Office for most crops; specify crop kind. Fill in Exhibit C (Objective Description of Variety) form as completely as possible to describe your variety.

18d. Optional additional characteristics and/or photographs. Describe any additional characteristics that cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the characteristics that are difficult to describe, such as plant habit, plant color, disease resistance, *etc.*

18e. Section 52(5) of the Act requires applicants to furnish a statement of the basis of the applicant's ownership. An Exhibit E form is available from the PVPO.

19. If "Yes" is specified *(seed of this variety be sold by variety name only, as a class of certified seed)*, the applicant **MAY NOT** reverse this affirmative decision after the variety has been sold and so labeled, the decision published, or the certificate issued. However, if "No" has been specified, the applicant may change the choice. *(See Regulations and Rules of Practice, Section 97.103).*

22. *See Sections 41, 42, and 43 of the Act and Section 97.5 of the regulations for eligibility requirements.*

23. *See Section 55 of the Act for instructions on claiming the benefit of an earlier filing date.*

21. CONTINUED FROM FRONT *(Please provide a statement as to the limitation and sequence of generations that may be certified.)*

22. CONTINUED FROM FRONT *(Please provide the date of first sale, disposition, transfer, or use for each country and the circumstances, if the variety (including any harvested material) or a hybrid produced from this variety has been sold, disposed of, transferred, or used in the U.S. or other countries.)*

23. CONTINUED FROM FRONT *(Please give the country, date of filing or issuance, and assigned reference number, if the variety or any component of the variety is protected by intellectual property right (Plant Breeder's Right or Patent).)*

NOTES: It is the responsibility of the applicant/owner to keep the PVPO informed of any changes of address or change of ownership or assignment or owner's representative during the life of the application/certificate. There is no charge for filing a change of address. The fee for filing a change of ownership or assignment or any modification of owner's name is specified in Section 97.175 of the regulations. *(See Section 101 of the Act, and Sections 97.130, 97.131, 97.175(h) of the Regulations and Rules of Practice.)*

To avoid conflict with other variety names in use, the applicant must check the appropriate recognized authority. For example, for agricultural and vegetable crops, contact: Seed Branch, AMS, USDA, Room 213, Building 306, Beltsville Agricultural Research Center--East, Beltsville, MD 20705. Telephone: (301) 504-8089. http://www.ams.usda.gov/lsg/seed/ls-sd.htm

S&E-470 (04-01) designed by the Plant Variety Protection Office with WordPerfect 6.0a. Replaces STD-470 (02-99) which is obsolete.

EXHIBIT - A

Origin and Breeding History of the Variety:

'Georgia-01R' is a new multiple pest resistant runner-type peanut (Arachis hypogaea L. subsp. hypogaea var. hypogaea) cultivar that was released by the Georgia Agricultural Experiment Stations in 2001. It was developed at the University of Georgia, Coastal Plain Experiment Station, Tifton, Georgia.

Georgia-01R originated from a cross made in 1989 between PI 203395 and Georgia Browne. PI 203395 and PI 203396 are very similar large-seeded peanut introductions with late maturity and good disease resistance. PI 203396 is one parent of Southern Runner. Georgia Browne is a small-seeded, multiple-disease resistant cultivar that was developed from a cross between Southern Runner and Sunbelt Runner. Sequential selection method was practiced within the F_2, F_3, and F_4 segregating populations, and performance testing was begun in the $F_{4:6}$ generation with the advanced pure-line selection, GA 942511. For the past seven years (1995-2001) field observations and data indicate that the varietal characteristics of Georgia-01R are very uniform and stable, and no off-types have yet been found.

RHD 12/6/2004

variants or

SEQUENTIAL SELECTION METHOD

1989	PI 203395 X Georgia Browne
1990	F_1 Increase
1991-93	F_2-F_4 Individual Resistant Plant Selections*
1994	F_5 Progeny Row Increase
1995-97	F_6-F_8 Preliminary Yield Trials
1998-2001	F_9-F_{12} Multilocation Yield Trials
2001	F_{12} Released as 'Georgia-01R'

* Individual plant selections were based upon pod shape and size, number of seed per pod, seed size, testa color, growth habit, maturity, yield and grade characteristics. Individual resistant plants were selected under heavy leafspot disease pressure, heavy soilborne disease pressure, and heavy tomato spotted wilt virus (TSWV) disease pressure.

EXHIBIT - B

Statement of Distinctness:

Georgia-01R most closely resembles Florida MDR 98 and C-99R. However, it is distinctively different from these two peanut cultivars in having a darker green leaf color, greater TSWV, CBR, leafspot and leafhopper resistance (see attached supporting data), and a larger percentage of jumbo runner sound mature kernel distribution (Exhibit D). Georgia-01R is unique from other runner-type peanut cultivars in having a spreading runner growth habit, dark green foliage, late-maturity, moderately pronounced pod reticulation and constriction, large percentage of jumbo seed size, and tan testa color. These combinations of distinct traits are all under genetic control and can be used as long-term distinguishing markers for Georgia-01R. Georgia-01R has also a high level of multiple pest resistance (Table 1) to both early and late leafspot [Cercospora arachidicola Hori and Cercosporidium personatum (Berk. & Curt.) Deighton, respectively], stem rot or white mold (Sclerotium rolfsii Sacc.), tomato spotted wilt virus (TSWV), leafhoppers (Empoasca fabae Harris) and/or leaf scorch (Leptosphaerulina crassiasca Sachet).

Table 1. THREE-YEAR AVERAGE DISEASE INCIDENCE, LEAFSPOT RATINGS, POD YIELD, AND DOLLAR VALUE OF GEORGIA-01R VS. FOUR RUNNER-TYPE PEANUT CULTIVARS WHEN GROWN WITHOUT PESTICIDES IN GEORGIA, 1997-99.

Runner Cultivar	TSWV[a] (%)	TD[b] (%)	ELSR[c] (1-9)	LLSR[d] (1-9)	Yield (lb/a)	Value ($/a)
Georgia-01R	9 c*	16 c	2 c	3 d	3093 a	1002 a
Southern Runner	14 bc	26 b	3 b	4 c	2167 bc	701 b
Georgia Browne	11 bc	25 b	4 a	6 b	2602 ab	677 b[†]
GK-7	23 a	40 a	5 a	7 a	1931 c	591 b
Florida MDR 98	15 b	24 b	3 b	4 c	1794 c	566 b
C-99R[‡]	14	20	3	4	2497	647

*Means within the same column followed by the same letter do not differ significantly at $P \leq 0.05$.

[a] TSWV = Tomato Spotted Wilt Virus incidence at mid-season.
[b] TD = Total Disease incidence at harvest.
[c] ELSR/[d]LLSR = Early/Late Leaf Spot Rating on a 1-9 scale in August, where 1 = immune and 9 = dead plants.

[†] Georgia Browne dollar value discounted $100/ton from the USDA runner-type price support level.
[‡] 1-yr data (1999).

Table 1
Average of mid-season TSWV disease incidence among 30 peanut genotypes at the Southeast Georgia Branch Station near Midville, GA, 1999–2001

Peanut genotype	Mid-season disease incidence[a]		
	1999 (%)	2000 (%)	2001 (%)
NC 8C	—	42.1 a	20.8 a
Perry	—	38.3 a	21.2 a
NC 3033	14.2 ab	32.1 b	19.6 ab
NC 12C	17.5 a	31.2 b	16.2 bc
Florida MDR 98	9.6 cd	24.6 cd	13.3 cd
C-99R	8.8 c–e	26.2 c	8.3 e–i
GA 962569	8.8 c–e	22.1 c–e	10.4 d–f
GA 981510	—	21.2 de	10.8 de
Georgia Hi-O/L	6.7 c–f	19.2 e–g	10.8 de
Southern Runner	9.6 cd	19.6 ef	9.2 e–h
Georgia Green	5.4 ef	19.6 ef	7.1 f–k
GA 981516	—	17.9 e–h	7.9 e–j
Carver	—	15.4 f–i	9.6 e–g
GA 962543	2.9 f	15.4 f–i	8.3 e–i
GA 942509	7.5 c–e	14.2 hi	7.9 e–j
GA 981509	—	15.0 f–i	7.1 f–k
GA 981521	—	13.8 hi	7.9 e–j
GA 942510	7.5 c–e	15.0 f–i	6.2 g–k
GA 962533	5.0 ef	15.8 f–i	5.0 i–k
GA 981517	—	14.6 g–i	6.2 g–k
GA 981511	—	14.2 hi	6.2 g–k
GA 981520	—	14.2 hi	5.8 h–k
Georgia Browne	—	14.2 hi	5.4 i–k
GA 962540	6.2 d–f	12.9 i	6.2 g–k
GA 942516	6.7 c–f	13.3 hi	4.6 jk
GA 982508	—	13.8 hi	4.2 k
Georgia-01R	5.8 d–f	11.7 i	3.8 k
GA 962539	10.4 bc	—	—
GA 971503	8.8 c–e	—	—
GA 971504	6.7 c–f	—	—

[a] Means within the same column followed by the same letter do not differ significantly at k-ratio = 100 (ca. $P \leqslant 0.05$).

REPRODUCE LOCALLY. Include form number and date on all reproductions.

Form Approved OMB NO 0581-0055

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY
PLANT VARIETY PROTECTION OFFICE
BELTSVILLE, MD 20705

Exhibit C

OBJECTIVE DESCRIPTION OF VARIETY
Peanut (*Arachis hypogaea*)

NAME OF APPLICANT (S)	TEMPORARY OR EXPERIMENTAL DESIGNATION	VARIETY NAME
Univ. of GA Research Foundation	GA 942511	Georgia - 01R

ADDRESS *(Street and No. or RD No., City, State, Zip Code, and Country)*

Boyd Graduate Studies Research Center
Athens, GA 30602-7411

FOR OFFICIAL USE ONLY

PVPO NUMBER

PLEASE READ ALL INSTRUCTIONS CAREFULLY:

Place the appropriate number that describes the varietal character of this variety in the boxes below. Place a zero in the first box

e.g., [0][8][9] or [0][9]) when a number is either 99 or less or 9 or less.

1. BOTANICAL TYPE:

[1] Flowering on the Main Stem: 1 = Absent 2 = Present

[1] Branching Pattern: 1 = Alternate – Pairs of vegetative and reproductive branches (Virginia)
2 = Sequential – Continuous reproductive branches (Valencia-Spanish) _____
3 = Other (Specify) _____

2. PLANT:

[1] Habit: 1 = Prostrate (Florunner) 2 = Decumbent (NC–5) 3 = Semi-Erect (Florispan) 4 = Erect (Starr)

[3] Branching: 1 = Sparse (Valencia) 2 = Moderate (Starr) 3 = Profuse (Florunner)

3. MATURITY:

[2] Region: 1 = Virginia, North Carolina 2 = Southeast United States 3 = Southwest United States 4 = Other

[1][6][0] Number of Days to Maturity Approximately in South Georgia

[ ][ ] Number of Days Earlier Than

[1][8] Number of Days Later Than

[ ] [8] 1 = Starr 2 = Florunner 3 = Florigiant 4 = Virginia 61R 5 = NC-2 6 = NC-5 7 = Southeastern Runner 56-15 8 = Other (Specify) Georgia Green

4. LEAVES:

[3] Color at 60 Days (Nickerson Color Designation _____)

1=Light Green (10gy 6/9)
2= Medium Green (2.5G 5/9)
3=Dark green (5G 4/7)
4= Other (Specify)

[6][7] mm Leaflet Length (Basal Leaflet of the Youngest Fully Opened Leaf)

[2.][5][4] Leaflet Length/Width Ratio

6

5. POD (Average for 20 pods at maturity):

[3][0] mm Length [1][5] mm Diameter

[4][9][3][6] KG./HA. Pod Yield

[1][0] % ~~Less~~ More Than w/pesticides [8]

[2][0] % More Than w/o pesticides [8]

1 = Starr 2 = Florunner 3 = Florigiant
4 = Virginia 61R 5 = NC-2
6 = NC-5 7 = Southeastern Runner 56-15
8 = Other (Specify) C-99R

[2][9] % Fancy Size: (% riding 13.46 mm., 34/64 Inch, Spacing Set on Presizer Roller

[2] Number of Seeds per Pod: 1 = 1 2 = 2 3 =3 4 =3-4 5 = 2-3-4

[2] Constriction: 1 = Shallow or None (Virginia 56R, Argentine) 2 = Medium (Virginia 61R) 3 = Deep (Starr)

[1] Surface: 1 = Glabrous (Florunner) 2 = Pubescent (Florispan)

[1] Beak: 1 = Absent 2 = Inconspicuous 3 = Pronounced

6. SEED (Mature, cured but not aged):

[0][3] Coat Color: 1 = White (Pearl) 2 = Cream 3.= Tan (Starr) 4 = Brown 5 = Pink (Florigiant)
6 = Red 7 = Purple 8 = Dark Purple 9 = Variegated
10 = Other (Specify) _____

[1] Coat Surface: 1 = Smooth 2 = Undented [1] 1 = Uniform Color 2 = Blemished

[6] Shape: 1 = Spheriodal (Starr) 2 = Short Broad (Florunner) 3 = Elongated-Slender (Dixie Runner)
4 = Cylindrical-tapered Ends 5 = Cylindrical Blunt Ends (NC-2) 6 = Other (Specify) Rounder

[1][6] mm Length [1][2] mm Width [6][7] Grams per 100 Seeds (6% Moisture)

7. DISEASE RESISTANCE: (0 = Not Tested, 1 = Susceptible, 2 = Moderately Susceptible, 3 = Moderately Resistant, 4 = Resistant)

[4]	Southern Stem Rot	[0]	Rust	[4]	Early Leaf Spot	[4]	Virus X TSWV
[4]	Southern Leaf Spot	[0]	Mosaic	[0]	Pod Rot Complex	[4]	Other (Specify) CBR

8. INSECT RESISTANCE: (0 = Not Tested, 1 = Susceptible, 2 = Moderately Susceptible, 3 = Moderately Resistant, 4 = Resistant)

[1]	Thrips	[0]	Burrowing Bug	[4]	Leaf Hopper	[0]	Nematode (Specify species) _____
[0]	Southern Corn Rootworm	[0]	Lesser Cornstalk Borer	[0]	Aphid	[ ]	Other (Specify) _____

9. COMPARISON OF SUBMITTED VARIETY WITH ONE OR MORE SIMILAR VARIETIES:

VARIETY	OIL* (%)	PROTIEN* (%)	OLEIC: * LINOLEIC ACID RATIO	IODINE* NUMBER	SHELLING (%)	SMK** (%)	ELK+ (%)	MAIN STEM HEIGHT (CM)
Submitted	46	28	3.1	91	80	74	46	48
Similar	49	28	2.3	97	78	73	36	44
Name of Similar Variety	C-99R	C-99R	C-99R	C-99R	C-99R	C-99R	C-99R	C-99R

* From Sound Mature Kernels ** Sound Mature Kernels + Extra Large Kernels

10. INDICATE A VARIETY WHICH MOST CLOSELY RESEMBLES THAT SUBMITTED:

CHARACTER	VARIETY	CHARACTER	VARIETY
Pod Color	C-99R	Seedling Vigor	C-99R
Seed Dormancy	C-99R	Hull Thickness	C-99R
Seed Size	C-99R	Leaf Color	C-99R

11. COMMENTS: (Additional description or clarification -- such as: relative disease reactions may be compared with standard varieties)

63.05% Oleic and 20.61% Linoleic Fatty Acid Composition

lower than ND474), ND304W was released as a source of early maturity in white dent breeding programs. This inbred has not been evaluated for resistance to specific insects or diseases or for tolerance to specific herbicides. Breeder seedstocks are maintained by the North Dakota Agricultural Experiment Station and can be obtained in germplasm quantities (25 kernels) from H. Z. Cross, Agronomy Dep., North Dakota State Univ., Fargo, ND 58105.

H. Z. CROSS (1)

References and Notes

1. Professor of agronomy, North Dakota State Univ., Fargo, ND 58105. Published with the approval of the director of the North Dakota Agric. Exp. Stn. as Journal Article no. 1340. Registration by the Crop Sci. Soc. of Am. Accepted 30 July 1984.

REGISTRATION OF TIFTON-8 PEANUT GERMPLASM

TIFTON-8 (*Arachis hypogaea* L. subsp. *hypogaea* var. *hypogaea*) (Reg. no. GP 39) was developed and released cooperatively by USDA-ARS, and the Virginia and Georgia Agricultural Experiment Stations. Tifton-8 has resistance to Cylindrocladium black rot caused by *Cylindrocladium crotalariae* (Loos) Bell and Sobers (1,10,11), leafspots caused by *Cercospora arachidicola* Hori and *Cercosporidium personatum* (Bert. & Curt.) Deighton (11), southern corn rootworm (*Diabrotica undecimpunctata howardi* Barber) (2), tobacco thrips (*Frankliniella fusca* Hinds) (2,5,6,7), velvetbean caterpillar (*Anticarsia gemmatalis* Hubner) (4), and drought (3,4). The larger than average root system (volume or dry weight) may contribute to its ability to escape drought (3). The genotype also is less susceptible than the major cultivars 'Florigiant' and/or 'Florunner' to corn earworm (*Heliothis zea* Boddie) (5,6,7), Diplodia collar rot caused by *Diplodia gossypina* Cooke (12), and *Aspergillus parasiticus* Speare (8). These pathogens, insects, and drought are of economic importance in the major peanut producing states. Such a wide degree of multiple pest resistance and stress tolerance will make Tifton-8 useful in most peanut breeding programs.

Tifton-8 originated as a pure-breeding virginia-type plant found in 1961 in a spanish-type introduction (PI 261976) from Paraguay. Progeny from the plant were maintained by bulking in succeeding generations. Tifton-8 is a large-seeded virginia-type peanut with a spreading-bunch growth habit. Seed have a tan seedcoat color, and average 9% fewer g/100 seed than Florigiant (78 g vs. 83 g). Pods have moderate constriction and reticulation, slight pubescence, and have slightly fewer fancy pods than Florigiant (80% vs. 86%). Two-seeded pods are most frequent, but a few single-seeded and an occasional three-seeded pod occur. Tifton-8 matures up to 14 days later than Florigiant. Yields are equal to Florigiant in years with adequate rainfall distribution, but can be up to 14% greater in years of low rainfall. Tifton-8 is unacceptable commercially because of its substandard blanching and flavor characteristics (9).

Limited quantities of seed (up to 50 g) will be provided for research purposes upon written request to the Tidewater Res. Ctr., Suffolk, VA 23437, or the Dep. of Agronomy, Univ. of Georgia, Coastal Plain Stn, Tifton, GA 31793.

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REGISTRATION OF LN80-7579 GERMPLASM LINE OF SOYBEAN

SOYBEAN [*Glycine max* (L.) Merr.] line LN80-7579 (Reg. no. GP 51) was released as parent stock for soybean breeding and genetics programs because it has a higher level of resistance to brown stem rot (BSR) [caused by *Phialophora gregata* (Allington and Chamberl.) W. Gams] than BSR 201 in Illinois. It was selected at the Illinois Agricultural Experiment Station cooperatively with the USDA-ARS.

LN80-7579 is an F_4 plant selection from the cross 'Century' × A76-304020 which was made at the Iowa Agriculture and Home Economics Experiment Station. A76-304020 is a BSR resistant line selected from the cross ('Beeson' × AP68-1016)×(L15 × 'Calland'). AP68-1016 was selected from a line moderately resistant to BSR from a backcross Clark'[5] × PI84946-2. L15 is a high-yielding experimental line selected from the backcross 'Wayne'[6] × 'Clark 63'. The F_2 and F_3 generations were advanced at the Puerto Rico Agricultural Experiment Station by the single-seed descent method. LN80-7579 was evaluated in Illinois for BSR resistance and agronomic performance during 1981 to 1983. It was evaluated in Preliminary Test IIA of the Uniform Soybean Tests, Northern states during 1983.

LN80-7579 has purple flowers, brown pubescence, brown pods, and seeds with dull yellow coats and black hila. It is of Group II maturity averaging 1 day later than 'Corsoy 79' and 2 days earlier than 'Century'. In comparison with Century, LN80-7579 averages 2% lower in seed yield in the absence of BSR and is similar in lodging, plant height, seed quality, seed weight, seed protein percentage, and seed oil percentage.

LN80-7579 is resistant to Races 1 and 2 of phytophthora

For the past few years (Tables 2 & 3), Georgia-01R has shown similar TSWV resistance as Georgia Green and significantly less disease incidence than all other runner-type cultivars. Georgia-01R was also found to be comparable to Georgia Green in yield, grade, and dollar values when grown with pesticides over multilocations in Georgia.

Table 2. THREE-YEAR (23 TESTS) AVERAGE DISEASE INCIDENCE, YIELD, GRADE, SEED SIZE, AND DOLLAR VALUE OF GEORGIA-01R VS. FOUR RUNNER-TYPE PEANUT CULTIVARS WHEN GROWN WITH PESTICIDES OVER MULTILOCATIONS IN GEORGIA, 1998-2000.

Runner Cultivars	TSWV (%)	TD (%)	Yield (lb/a)	TSMK (%)	Seed (no./lb)	Value ($/a)
Georgia-01R	8 b*	18 c	4263 a	74 a	671 bc	1364 a
Georgia Green	8 b	24 b	4015 b	74 a	807 a	1296 a
Florida MDR 98	14 a	33 a	3569 c	73 ab	682 b	1133 b
Southern Runner	15 a	34 a	3386 c	72 bc	823 a	1065 b
ViruGard	14 a	35 a	3418 c	71 c	655 c	1063 b

*Means within the same column followed by the same letter do not differ significantly at $P \leq 0.05$.

Table 3. TWO-YEAR (18 TESTS) AVERAGE DISEASE INCIDENCE, YIELD, GRADE, SEED SIZE, AND DOLLAR VALUE OF GEORGIA-01R VS. FIVE RUNNER-TYPE PEANUT CULTIVARS WHEN GROWN WITH PESTICIDES OVER MULTILOCATIONS IN GEORGIA, 1999-2000.

Runner Cultivar	TSWV (%)	TD (%)	Yield (lb/a)	TSMK (%)	Seed (no./lb)	Value ($/a)
Georgia-01R	8 c*	20 d	4403 a	74 ab	667 cd	1408 a
Georgia Green	8 c	27 c	4118 b	75 a	795 b	1333 b
C-99R	14 b	30 b	3902 b	73 bc	662 cd	1234 c
Florida MDR 98	16 ab	35 a	3627 c	73 bc	678 c	1150 d
ViruGard	15 ab	38 a	3483 cd	71 d	644 d	1080 de
Southern Runner	17 a	38 a	3353 d	72 c	822 a	1054 e

*Means within the same column followed by the same letter do not differ significantly at $P \leq 0.05$.

EXHIBIT-D

Additional Description of the Variety:

Georgia-01R has a significantly larger percentage of jumbo runner sound mature kernel (SMK) distribution than other similar late-maturing runner-type peanut cultivars when grown with irrigation and pesticides in Georgia (Table 4) as well as with irrigation but without pesticides in Georgia (Table 5). Georgia-01R has shown on the average approximately 10% more jumbo runner seed than C-99R and Florida MDR98 and >25% more jumbo seed size than Southern Runner.

Table 4. THREE-YEAR (12 TESTS) AVERAGE SMK DISTRIBUTION OF GEORGIA-01R VS. THREE SIMILAR LATE-MATURING RUNNER-TYPE PEANUT CULTIVARS WHEN GROWN WITH IRRIGATION AND PESTICIDES IN GEORGIA, 1998-2000.

Runner Cultivar	Jumbo (%)	Med. (%)	No. 1 (%)
Georgia-01R	46 a*	15 c	2 c
Florida MDR 98	38 b	24 b	3 b
Southern Runner	17 c	44 a	6 a
C-99R †	36	28	3

*Means within the same column followed by the same letter do not differ significantly at P≤0.05.

† 2-yr data only (1999-2000)

Table 5. THREE-YEAR AVERAGE SMK DISTRIBUTION OF GEORGIA-01R VS. THREE SIMILAR LATE-MATURING RUNNER-TYPE PEANUT CULTIVARS WHEN GROWN WITH IRRIGATION BUT WITHOUT PESTICIDES IN GEORGIA, 1997-99.

Runner Cultivar	Jumbo (%)	Med. (%)	No. 1 (%)
Georgia-01R	43 a*	20 c	3 b
Florida MDR 98	27 b	32 b	5 a
Southern Runner	17 c	46 a	7 a
C-99R †	32	29	4

*Means within the same column followed by the same letter do not differ significantly at P≤0.05.

† 1-yr data only (1999)

Table 2
Average of mid to late season disease incidence (predominantly CBR and TSWV) among 30 peanut genotypes at the Southeast Georgia Branch Station near Midville, GA, 1999–2001

Peanut genotype	Mid-late season disease incidence[a]			3-yr mean (99–01)
	1999 (%)	2000 (%)	2001 (%)	
NC 8C	—	69.6 a	47.9 a	—
Perry	—	60.4 ab	40.4 a–c	—
NC 3033	58.3 a	60.0 ab	40.4 a–c	52.9 a
GA 981509	—	66.2 ab	30.0 a–e	—
GA 981510	—	58.8 b	35.4 a–e	—
Florida MDR 98	40.0 bc	38.8 c–g	47.5 a	42.1 b
NC 12C	40.8 bc	46.2 c	36.2 a–e	41.1 b
C-99R	37.1 b–d	39.6 c–f	35.8 a–e	37.5 bc
GA 942509	40.0 bc	32.1 f–j	41.7 ab	37.9 bc
Georgia Hi-O/L	34.2 cd	32.1 f–j	39.6 a–d	35.3 b–d
GA 981516	—	44.2 cd	25.8 b–e	—
GA 962533	35.0 b–d	35.4 d–h	31.2 a–e	33.9 b–d
GA 962569	47.7 ab	31.2 f–j	33.8 a–e	37.2 b–d
Georgia Green	38.3 b–d	38.3 c–g	24.2 b–e	33.6 b–d
GA 981517	—	35.0 d–h	27.5 a–e	—
Georgia Browne	—	42.5 c–e	19.2 de	—
GA 942516	30.8 c–e	23.3 ij	32.5 a–e	28.9 d–f
GA 942510	37.1 b–d	29.2 g–j	27.5 a–e	31.2 c–f
Carver	—	27.1 h–j	28.3 a–e	—
Southern Runner	41.7 bc	31.2 f–j	22.1 b–e	31.7 c–e
GA 981520	—	32.5 e–i	20.4 c–e	—
GA 962540	19.6 e	27.9 h–j	21.7 b–e	23.1 f
GA 981511	—	30.1 f–j	17.1 de	—
GA 962543	26.2 de	27.5 h–j	19.2 de	24.3 ef
GA 981521	—	27.1 h–j	19.6 c–e	—
Georgia-01R	27.1 de	23.8 ij	19.6 c–e	23.5 ef
GA 982508	—	22.1 j	20.4 c–e	—
GA 971503	32.9 cd	—	—	—
GA 962539	32.1 cd	—	—	—
GA 971504	30.4 c–e	—	—	—

[a] Means within the same column followed by the same letter do not differ significantly at k-ratio = 100 (ca. $P \leq 0.05$).

Table 3
Average of late-season disease incidence (predominately CBR and TSWV) among 30 peanut genotypes at the Southeast Georgia Branch Station near Midville, GA, 1999–2001

Peanut genotype	Late-season disease incidence[a]			3-yr mean (99–01)
	1999 (%)	2000 (%)	2001 (%)	
NC 8C	—	89.2 a	72.1 a	—
NC 3033	74.2 a	84.2 ab	66.7 ab	75.0 a
Perry	—	79.6 a–c	68.3 ab	—
GA 981510	—	86.2 a	57.1 a–e	—
GA 981509	—	85.8 a	53.8 a–f	—
Florida MDR 98	47.1 b–f	65.0 d–f	65.8 a–c	59.3 bc
NC 12C	57.5 bc	66.7 d–f	59.6 a–d	61.2 b
GA 962533	50.8 b–e	72.5 c–e	52.5 a–f	58.6 bc
GA 942509	47.5 b–f	63.8 d–g	57.5 a–e	56.2 bc
GA 981516	—	80.0 a–c	41.2 c–f	—
Georgia Green	57.5 bc	72.5 c–e	47.1 b–f	59.0 bc
C-99R	43.8 c–f	60.8 f–h	55.8 a–f	53.5 b–d
Georgia Hi-O/L	53.3 b–d	52.5 g–i	63.3 a–d	56.4 bc
GA 981517	—	63.8 d–g	45.8 b–f	—
Georgia Browne	—	73.3 b–d	34.2 ef	—
Southern Runner	51.7 b–d	62.1 d–h	44.6 b–f	52.8 b–d
GA 942510	44.6 b–f	57.5 f–i	47.9 a–f	50.0 c–e
GA 981520	—	64.2 d–f	40.4 d–f	—
Carver	—	56.2 f–i	44.6 b–f	—
GA 981521	—	61.7 e–h	39.2 d–f	—
GA 942516	34.2 fg	52.1 hi	46.2 b–f	44.2 d–f
GA 981511	—	60.4 f–h	32.9 ef	—
GA 962569	57.9 b	47.9 ij	43.8 b–f	49.9 c–e
GA 962543	41.2 d–f	52.5g–i	33.8 ef	42.5 e–g
GA 982508	—	46.2 ij	39.2 d–f	—
GA 962540	24.6 g	48.8 ij	31.2 f	34.9 g
Georgia-01R	37.1 e–g	38.8 j	32.9 ef	36.2 fg
GA 971504	52.9 b–d	—	—	—
GA 971503	41.7 d–f	—	—	—
GA 962539	37.5 e–g	—	—	—

[a] Means within the same column followed by the same letter do not differ significantly at k-ratio = 100 (ca. $P \leq 0.05$).

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Table 4
Average CBR incidence after digging among 30 peanut genotypes at the Southeast Georgia Branch Station near Midville, GA, 1999–2001

Peanut genotype	CBR incidence[a]			3-yr mean (99–01)
	1999 (%)	2000 (%)	2001 (%)	
C-99R	57.0 ab	56.2 a	44.2 ab	52.5 a
Southern Runner	58.8 a	50.4 ab	44.6 ab	51.2 a
GA 942509	52.0 a–d	39.6 b–d	50.0 a	47.2 ab
Florida MDR 98	54.5 a–c	39.2 b–e	48.3 a	47.4 ab
GA 942510	54.5 a–c	36.2 b–f	38.8 a–c	43.2 a–c
GA 981509	—	43.3 a–c	26.7 a–c	—
NC 8C	—	32.5 c–g	37.5 a–c	—
Georgia-01R	53.2 a–c	32.9 c–g	37.1 a–c	41.1 bc
NC 3033	48.2 a–e	24.2 f–h	45.0 ab	39.2 bc
GA 942516	35.8 e–g	28.8 c–h	37.5 a–c	34.0 cd
Perry	—	24.6 e–h	40.4 a–c	—
GA 981510	—	32.5 c–g	31.2 a–c	—
Georgia Green	53.8 a–c	30.0 c–h	29.2 a–c	37.6 bc
Carver	—	25.8 d–h	32.9 a–c	—
Georgia Hi-O/L	41.8 b–f	22.9 f–h	35.8 a–c	33.5 cd
GA 962543	53.8 a–c	31.7 c–g	26.2 a–c	37.2 c
GA 981517	—	20.4 gh	32.1 a–c	—
Georgia Browne	—	29.2 c–h	23.3 a–c	—
GA 981521	—	21.7 f–h	27.9 a–c	—
GA 981520	—	22.9 f–h	26.7 a–c	—
GA 981516	—	25.4 d–h	21.7 a–c	—
GA 962540	28.2 fg	26.2 d–h	20.8 a–c	25.1 de
GA 962533	31.8 fg	20.8 gh	24.6 a–c	25.7 de
NC 12C	23.0 g	16.7 h	25.4 a–c	21.7 e
GA 982508	—	15.8 h	24.2 a–c	—
GA 962569	29.5 fg	18.8 gh	17.1 bc	21.8 e
GA 981511	—	18.3 gh	13.3 c	—
GA 971504	56.2 a–c	—	—	—
GA 971503	40.8 c–f	—	—	—
GA 962539	36.8 d–g	—	—	—

[a] Means within the same column followed by the same letter do not differ significantly at k-ratio = 100 (ca. $P \leqslant 0.05$).

Table 5
Average pod yields under heavy CBR disease pressure among 30 peanut genotypes at the Southeast Georgia Branch Station near Midville, GA, 1999–2001

Peanut genotype	Pod yield[a]			3-yr mean (99–01)
	1999 (kg/ha)	2000 (kg/ha)	2001 (kg/ha)	
Georgia-01R	2408 b–f	2904 a	2705 a	2672 a
Carver	—	2728 ab	2387 a	—
GA 982508	—	2843 a	2026 b–f	—
NC 12C	2577 a–d	2714 a–c	2157 a–d	2482 ab
GA 981511	—	2648 a–d	1908 b–f	—
GA 962569	2596 a–d	2592 a–e	1930 b–f	2373 a–c
GA 962533	2772 ab	2368 a–f	2022 b–f	2387 a–c
GA 942516	3077 a	2251 b–g	2065 b–e	2464 ab
GA 981517	—	2055 e–k	2205 a–c	—
GA 962543	2350 b–g	2188 c–i	2066 b–e	2201 b–d
GA 981516	—	2121 d–j	2039 b–f	—
Georgia Browne	—	1582 k–m	2326 a	—
Georgia Green	2503 a–e	1883 f–l	1929 b–f	2105 c–e
Georgia Hi-O/L	2689 a–c	2241 b–h	1534 e–h	2154 b–d
GA 981521	—	1722 g–m	1906 b–f	—
GA 981520	—	1846 f–l	1736 c–g	—
GA 962540	2429 b–f	1649 j–m	1890 b–f	1989 de
Southern Runner	2224 b–h	1603 j–m	1872 b–f	1899 d–f
Perry	—	1735 g–m	1619 d–h	—
C-99R	2104 c–h	1706 h–m	1468 f–h	1760 e–g
GA 981510	—	1401 l–n	1695 c–h	—
NC 3033	2002 d–h	1445 l–n	1646 c–h	1698 fg
GA 942510	1787 f–h	1522 k–m	1544 e–h	1618 fg
GA 942509	1845 f–h	1692 i–m	1287 gh	1607 fg
GA 981509	—	1210 mn	1656 c–h	—
Florida MDR 98	1742 gh	1563 k–m	1129 h	1478 g
NC 8C	—	1008 n	1575 e–h	—
GA 971503	1910 e–h	—	—	—
GA 962539	2146 b–h	—	—	—
GA 971504	1652 h	—	—	—

[a] Means within the same column followed by the same letter do not differ significantly at k-ratio = 100 (ca. $P \leqslant 0.05$).

Table 1. Disease assessment and performance evaluation among four peanut cultivars and 12 advanced Georgia breeding lines when grown without pesticides during 1996.[a]

Cultivar/ breeding line	Total disease	Early leaf spot rating	Late leaf spot rating[b]	Pod yield	Dollar value
	%	1-9[c]	1-9[c]	kg/ha	$/ha
GA 942506	8.8 b-e	5.3 d	6.5 de	2600 ab	1660 a
GA 942511	3.8 fg	2.0 j	3.2 h	2314 abc	1616 a
GA 942509	3.2 g	2.5 hij	3.3 h	2437 ab	1587 a
GA 942001	6.2 c-g	7.0 a	--	2528 ab	1556 ab
GA T-2844	10.5 bc	6.0 bc	--	2587 ab	1542 ab
GA 942503	6.2 c-g	5.8 cd	7.3 bc	2362 abc	1531 ab
Georgia Browne	5.5 efg	5.3 d	7.0 cd	2699 a	1497 ab
GA 931319	5.8 d-g	2.7 ghi	3.5 h	2146 bcd	1388 abc
GA 942510	3.0 g	2.2 ij	3.2 h	2136 bcd	1359 a-d
GA 942505	10.5 bc	5.3 d	6.7 de	2522 ab	1278 bcd
GK-7	10.0 bcd	6.3 bc	7.7 ab	1923 cd	1085 cde
Florunner	16.8 a	6.5 ab	8.0 a	1799 de	1070 de
GA 931320	8.0 b-f	3.2 f	4.2 g	1331 ef	907 ef
GA 942504	9.5 b-e	4.0 e	5.0 f	1315 f	838 ef
Southern Runner	5.5 efg	3.0 fgh	4.0 g	1173 f	807 ef
GA 931312	11.8 b	3.3 f	4.3 g	1133 f	671 f

[a]Within columns, means followed by the same letter are not significantly different at $P \leq 0.05$.

[b]Two early maturing advanced GA breeding lines (GA 942001 and GA T-2844) were dug prior to late leaf spot rating.

[c]1 to 9 scale, where 1 = immune and 9 = dead plants.

Table 2. Disease assessment and performance evaluation among five peanut cultivars and 11 advanced Georgia breeding lines when grown without pesticides during 1997.[a]

Cultivar/ breeding line	TSWV	Total disease	Early leaf spot rating	Late leaf spot rating[b]	Pod yield	Dollar value
	%	%	1-9[c]	1-9[c]	kg/ha	$/ha
GA T-2844	26.2 a	28.0 ab	4.2 ef	--	3716 a	2651 a
GA 942511	8.2 d	9.5 f	2.2 h	3.0 h	3564 ab	2549 ab
GA 942506	15.5 bc	15.8 def	4.5 de	6.2 c	3415 abc	2449 abc
GA 942505	11.8 cd	15.0 def	5.5 c	7.7 a	3395 abc	2411 a-d
GA 931307	17.5 bc	19.2 cd	3.8 f	5.0 d	3339 a-d	2367 a-d
GA 942503	16.2 bc	19.5 cd	6.3 b	8.0 a	3167 bcd	2313 b-e
GA 942001	18.8 b	24.5 bc	4.7 de	--	3112 cd	2167 c-f
GA 942009	17.0 bc	18.2 cd	7.2 a	8.0 a	3007 cde	2122 d-g
GA 942510	8.2 d	10.0 ef	2.2 h	3.2 gh	2905 def	2048 efg
GA 942509	7.0 d	9.5 f	2.3 h	3.5 fg	2559 fgh	1877 fgh
GA 942010	15.8 bc	16.2 def	6.8 ab	8.0 a	2646 efg	1851 gh
South. Runner	13.2 bcd	15.5 def	3.0 g	4.5 e	2191 hi	1612 hi
GK-7	29.5 a	33.0 a	5.3 c	7.2 b	2244 ghi	1581 hi
Georgia Browne	13.0 bcd	17.0 de	5.0 cd	6.2 c	2559 fgh	1536 i
Florunner	26.2 a	32.5 a	6.5 b	7.8 a	1997 i	1422 ij
Florida MDR 98	18.2 bc	19.2 cd	3.0 g	3.7 f	1530 j	1126 j

[a]Within columns, means followed by the same letter are not significantly different at $P \leq 0.05$.

[b]Two early-maturing advanced GA breeding lines (GA 942001 and GA T-2844) were dug prior to late leaf spot rating.

[c]1 to 9 scale, where 1 = immune and 9 = dead plants.

Table 3. Disease assessment and performance evaluation among five peanut cultivars and 11 advanced Georgia breeding lines when grown without pesticides during 1998.[a]

Cultivar/ breeding line	TSWV	Total disease	Early leaf spot rating	Late leaf spot rating[b]	Pod yield	Dollar value
	%	%	1-9[c]	1-9[c]	kg/ha	$/ha
GA 962533	7.0 e	18.8 gh	1.5 ef	4.0 d	4972 a	3313 a
GA 942509	14.2 cd	22.5 fgh	1.2 fg	2.3 f	3963 bc	2551 b
GA 942511	8.0 e	23.2 fgh	1.0 g	2.0 f	3460 de	2446 bc
GA 942510	9.5 de	14.5 h	1.2 fg	2.2 f	3584 b-e	2374 bcd
GA T-2844	20.0 b	34.2 cde	2.8 c	--	3733 bcd	2264 b-e
GA 962532	7.0 e	23.8 e-h	1.3 fg	4.2 cd	4743 a	2239 c-f
GA 962543	11.8 de	25.5 d-g	2.2 d	3.2 e	3200 ef	2173 c-g
GA 942506	10.0 de	35.5 cd	3.0 bc	4.7 bc	4025 b	2114 d-h
GA 962540	8.0 e	20.0 gh	2.0 d	3.3 e	2917 fg	2033 e-i
GA 962522	8.0 e	23.0 fgh	3.8 a	6.3 a	3531 b-e	2025 e-i
Georgia Browne	10.0 de	32.5 c-f	3.2 bc	5.0 b	3485 cde	1950 f-i
GK-7	18.2 bc	46.8 b	4.0 a	6.7 a	2855 fg	1885 ghi
Florida MDR 98	14.2 cd	27.0 d-g	1.8 de	3.2 e	2642 g	1840 hi
South. Runner	18.2 bc	38.2 bc	2.0 d	3.3 e	2625 g	1805 i
Florunner	30.5 a	60.8 a	3.3 b	6.2 a	2589 g	1449 j
GA 962539	8.0 e	22.5 fgh	2.0 d	3.0 e	2596 g	1404 j

[a]Within columns, means followed by the same letter are not significantly different at $P \leq 0.05$.

[b]Two early-maturing advanced GA breeding lines (GA 942001 and GA T-2844) were dug prior to late leaf spot rating.

[c]1 to 9 scale, where 1 = immune and 9 = dead plants.

FIELD SCREENING

FOR

INSECT RESISTANCE

AMONG

PEANUT GENOTYPES

VISUAL LEAFHOPPER RATING
(0-9 Scale)

0	=	0%	leafhopper burn (normal leaves)
1	=	<5%	leafhopper burn (yellowish v-tip chlorosis)
2	=	5-10%	leafhopper burn (yellowish v-tip chlorosis)
3	=	10-25%	leafhopper burn (yellowish v-tip chlorosis)
4	=	25-50%	leafhopper burn (yellowish v-tip chlorosis)
5	=	>50%	leafhopper burn + <5 % leaf lesion (necrosis)
6	=	>50%	leafhopper burn + 5-10% leaf lesion (necrosis)
7	=	>50%	leafhopper burn + 10-25% leaf lesion (necrosis)
8	=	>50%	leafhopper burn + 25-50% leaf lesion (necrosis)
9	=	>50%	leafhopper burn + >50% leaf lesion (necrosis)

2001 – LEAFHOPPER RATING (0-9 SCALE) AMONG PEANUT GENOTYPES WITHIN NO PESTICIDE IRRIGATED FIELD TRIAL

Peanut Genotype	Leafhopper Rating	Peanut Genotype	Leafhopper Rating
Georgia Hi-O/L	7.8 a*	Georgia Browne	5.8 de
GA 992526	7.7 a	Georgia-03L	5.7 ef
GA 942007-53	7.5 a	Southern Runner	5.3 fg
GA 992558	7.5 a	C-99R	5.3 fg
GA 992501	6.7 b	Florida MDR 98	5.0 g
GA 992540	6.5 bc	GA 942516	5.0 g
GA 992525	6.2 cd	GA 992504	5.0 g
Georgia-02C	6.2 cd	Georgia-01R	3.0 h
Mean			6.0
%CV			7.9

*Means within the same columns followed by the same letter do not differ significantly at $P \leq 0.05$.

2001 – LEAFHOPPER RATING (0-9 SCALE) AMONG PEANUT GENOTYPES WITHIN MINIMUM PESTICIDE IRRIGATED FIELD TRIAL

Peanut Genotype	Leafhopper Rating	Peanut Genotype	Leafhopper Rating
Georgia Hi-O/L	7.5 a*	Georgia Browne	5.2 def
GA 992526	6.7 b	Southern Runner	5.2 def
GA 942007-53	6.7 b	Georgia-03L	5.0 def
GA 992558	6.7 b	C-99R	5.0 def
GA 992501	6.2 bc	GA 992540	4.7 ef
Georgia-02C	6.2 bc	GA 942516	4.5 f
Florida MDR 98	5.5 cd	GA 992504	4.5 f
GA 992525	5.3 de	Georgia-01R	3.2 g
Mean			5.5
%CV			13.8

*Means within the same columns followed by the same letter do not differ significantly at $P \leq 0.05$.

02

2002 – LEAFHOPPER RATING (0-9 SCALE) AMONG PEANUT GENOTYPES WITHIN NO PESTICIDE IRRIGATED FIELD TRIAL

Peanut Genotype	Leafhopper Rating	Peanut Genotype	Leafhopper Rating
Georgia Hi-O/L	9.0 a*	Georgia-03L	6.5 d
GA 962569	8.5 ab	Hull	5.7 e
DP-1	7.8 bc	GA 962540	5.7 e
Georgia-02C	7.8 bc	GA 942516	5.7 e
Georgia Green	7.5 c	GA 992504	5.5 e
AgraTech 201	7.3 c	Carver	5.0 e
C-99R	6.5 d	Georgia-01R	3.2 f
Mean			6.5
%CV			12.1

*Means within the same columns followed by the same letter do not differ significantly at $P \leq 0.05$.

2002 – LEAFHOPPER RATING (0-9 SCALE) AMONG PEANUT GENOTYPES WITHIN MINIMUM PESTICIDE NONIRRIGATED FIELD TRIAL

Peanut Genotype	Leafhopper Rating	Peanut Genotype	Leafhopper Rating
GP-1	6.0 a*	Florida MDR 98	4.2 efg
Andru II	5.8 a	Tamrun OL01	4.2 efg
ViruGard	5.6 ab	C-99R	4.0 fg
ANorden	5.4 abc	Southern Runner	3.8 gh
DP-1	5.0 bcd	NemaTAM	3.8 gh
AgraTech 201	4.8 cde	Carver	3.2 h
Georgia-02C	4.8 cde	Hull	3.2 h
Georgia Green	4.6 def	Georgia-01R	1.0 i
Mean			4.3
%CV			15.2

*Means within the same columns followed by the same letter do not differ significantly at $P \leq 0.05$.

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2003 – LEAFHOPPER RATING (0-9 SCALE) AMONG PEANUT GENOTYPES WITHIN NO PESTICIDE IRRIGATED FIELD TRIAL

Peanut Genotype	Leafhopper Rating	Peanut Genotype	Leafhopper Rating
Georgia Hi-O/L	8.0 a*	GA 011557	6.5 de
DP-1	7.3 b	Hull	6.3 e
Georgia-03L	7.3 b	GA 011568	6.3 e
Georgia-02C	7.2 bc	GA 992504	6.2 ef
Georgia Green	7.0 bcd	GA 011567	6.2 ef
C-99R	6.7 cde	AP-3	5.7 f
GA 012602	6.7 cde	GA 002506	5.0 g
Carver	6.5 de	Georgia-01R	3.0 h
Mean			6.4
%CV			9.0

*Means within the same columns followed by the same letter do not differ significantly at $P \leq 0.05$.

2003 – LEAFHOPPER RATING (0-9 SCALE) AMONG PEANUT GENOTYPES WITHIN MINIMUM PESTICIDE NONIRRIGATED FIELD TRIAL

Peanut Genotype	Leafhopper Rating	Peanut Genotype	Leafhopper Rating
Georgia Hi-O/L	7.2 a*	GA 001909	5.5 c-f
Georgia-02C	6.5 ab	GA 011557	5.5 c-f
Georgia Green	6.2 bc	GA 012518	5.5 c-f
GA 001908	6.0 bcd	Gregory	5.5 c-f
Georgia-03L	5.8 b-e	GA 011567	5.3 def
GA 002501	5.8 b-e	GA 012519	5.3 def
GA 011528	5.8 b-e	GA 001913	5.2 efg
GA 012534	5.8 b-e	GA 992504	5.0 fg
GA 011568	5.7 c-f	GA 002506	4.5 g
GA 012535	5.7 c-f	Georgia-01R	2.7 h
Mean			5.5
%CV			13.3

*Means within the same columns followed by the same letter do not differ significantly at $P \leq 0.05$.

2003 – LEAFHOPPER RATING (0-9 SCALE) AMONG PEANUT GENOTYPES WITHIN MINIMUM PESTICIDE NONIRRIGATED FIELD TRIAL

Peanut Genotype	Leafhopper Rating	Peanut Genotype	Leafhopper Rating
Georgia Hi-O/L	8.0 a*	Tamrun OL02	6.3 d-g
DP-1	7.5 ab	Georgia-03L	6.2 efg
Wilson	7.5 ab	GA 011568	6.2 efg
Georgia-02C	7.5 ab	Georgia Green	6.0 fgh
Andru II	7.3 abc	GA 011528	6.0 fgh
GA 982502	7.3 abc	GA 011557	6.0 fgh
NC-V 11	7.2 bc	GA 011567	6.0 fgh
AgraTech 201	7.0 bcd	AP-3	5.7 ghi
ANorden	7.0 bcd	Carver	5.3 hij
Perry	6.8 b-e	Hull	5.0 ij
C-99R	6.7 c-f	C34-24	4.8 j
Gregory	6.3 d-g	Georgia-01R	3.3 k
Mean			6.4
%CV			10.1

*Means within the same columns followed by the same letter do not differ significantly at $P \leq 0.05$.

FIVE-TESTS AVERAGE PERFORMANCE WITH AND WITHOUT IRRIGATION OF 19 RUNNER AND 5 VIRGINIA-TYPE PEANUT GENOTYPES AT MULTILOCATIONS IN GEORGIA USING RECOMMENDED PESTICIDES, 1998.

Peanut Genotypes	TSWV (%)	TD (%)	Yield (lb/a)	TSMK (%)	Seed (no./lb)	Value ($/a)
Runner Types:						
GA 942511	5.0 jk*	11.5 j	3762 ab	72 ab	686 j	1202 a
Georgia Green	4.0 k	15.1 ij	3644 abc	73 a	851 a	1162 a
Georgia Hi-O/L	7.2 g-j	19.4 hij	3944 a	68 a-d	593 l	1161 a
Southern Runner	7.7 g-j	20.0 g-j	3503 a-d	72 ab	824 abc	1104 ab
Georgia Bold	7.6 g-j	29.6 def	3462 a-e	72 ab	739 gh	1091 ab
GA 942010	5.9 h-k	22.6 f-i	3771 ab	68 a-e	729 hi	1086 ab
GA 942009	7.2 g-j	25.9 fgh	3790 ab	68 a-e	636 k	1076 abc
Florida MDR 98	9.1 efg	22.5 f-i	3360 b-f	72 ab	693 ij	1073 abc
ViruGard	8.0 f-i	24.9 fgh	3183 c-h	72 ab	695 ij	1003 a-e
Tamrun 96	8.0 f-i	28.4 efg	3370 b-f	67 a-e	791 cde	999 a-e
Georgia Runner	8.6 e-h	35.3 b-e	2964 e-h	70 abc	819 a-d	919 b-g
GK-7	9.8 d-g	37.6 bcd	2897 f-i	70 abc	781 ef	897 b-g
Florunner	12.6 abc	39.6 b	2773 hij	69 abc	828 ab	848 c-h
SunOleic 97R	12.5 a-d	42.6 ab	2812 ghi	68 a-e	834 ab	845 c-h
Andru 93	12.3 bcd	41.0 b	3020 d-h	65 b-e	787 def	844 c-h
AgraTech 108	11.3 b-e	38.6 bc	2930 e-h	63 cde	766 efg	788 d-h
GA 942001	5.8 ijk	22.9 f-i	2999 d-h	61 e	798 b-e	749 fgh
Flavor Runner 458	15.1 a	51.0 a	2268 j	68 a-e	825 abc	686 gh
AgraTech 120	13.8 ab	50.2 a	2395 ij	64 cde	751 fgh	658 h
Virginia Types:						
Gregory	7.1 g-j	20.5 ghi	3573 abc	64 cde	451 n	1019 a-d
NC-V 11	8.5 f-i	23.5 f-i	3323 b-g	69 a-d	537 m	989 a-e
VA-C 92R	10.7 c-f	30.9 c-f	3370 b-f	65 a-e	468 n	983 a-f
NC 12C	12.1 bcd	29.2 def	2838 f-i	64 cde	525 m	791 d-h
NC 7	11.9 bcd	36.8 b-e	2951 e-h	62 de	504 m	781 e-h

*Within columns, means followed by the same letter are not significantly different at $P \leq 0.05$.

SIX-TESTS AVERAGE PERFORMANCE WITH AND WITHOUT IRRIGATION OF 14 RUNNER AND 7 VIRGINIA-TYPE PEANUT GENOTYPES AT MULTILOCATIONS IN GEORGIA USING RECOMMENDED PESTICIDES, 1999.

Peanut Genotypes	TSWV (%)	TD (%)	Yield (lb/a)	TSMK (%)	Seed (no./lb)	Value ($/a)
Runner Types:						
GA 942511	7.6 i*	14.6 j	3898 a	72 abc	697 efg	1234 a
Georgia Green	7.3 i	19.2 ij	3796 ab	73 ab	816 ab	1220 ab
Georgia Hi-O/L	10.8 h	23.1 hi	3750 ab	70 a-d	531 lm	1188 abc
Florida MDR 98	12.0 gh	26.1 gh	3578 abc	72 ab	708 def	1140 a-d
C-99R	13.2 fgh	26.3 gh	3584 abc	71 a-d	668 fgh	1109 a-e
Georgia Bold	15.1 def	36.2 de	3197 c-f	74 a	733 cde	1023 d-g
GA 962540	5.2 i	15.4 j	3092 d-g	72 abc	774 abc	998 d-h
ViruGard	14.0 efg	33.7 def	3181 c-f	68 c-f	659 f-i	974 e-i
Southern Runner	17.3 cd	31.5 efg	3018 efg	71 abc	836 a	947 f-i
Andru 93	20.5 b	47.6 b	3131 d-g	67 def	721 c-f	938 f-i
SunOleic 97R	17.6 cd	46.1 b	2761 fg	72 abc	761 bcd	868 ghi
GK-7 High Oleic	17.6 cd	44.4 bc	2786 fg	72 abc	736 cde	868 ghi
Tamrun 96	20.9 b	43.4 bc	2822 fg	70 b-e	777 abc	862 hi
Flavor Runner 458	24.4 a	56.6 a	2173 h	72 abc	815 ab	683 j
Virginia Types:						
GA 942516	6.5 i	16.5 j	3602 abc	71 a-d	609 hij	1190 abc
NC-V 11	15.6 c-f	32.7 ef	3496 a-d	65 fg	636 ghi	1062 b-f
VA 98R	16.1 cde	35.6 de	3391 b-e	64 fg	596 ijk	1044 c-f
Gregory	16.9 cde	29.7 fg	3435 b-e	65 fg	481 m	1024 d-g
VA-C 92R	18.0 bc	38.7 cd	3032 efg	68 c-f	513 lm	934 f-i
NC 7	24.0 a	48.3 b	2782 fg	63 g	543 klm	827 ij
NC 12C	26.4 a	43.4 bc	2688 g	66 efg	564 jkl	825 ij

*Within columns, means followed by the same letter are not significantly different at $P \leq 0.05$.

SIX-TESTS AVERAGE PERFORMANCE WITH AND WITHOUT IRRIGATION OF 17 RUNNER AND 7 VIRGINIA-TYPE PEANUT GENOTYPES AT MULTILOCATIONS IN GEORGIA USING RECOMMENDED PESTICIDES, 2000.

Peanut Genotypes	TSWV (%)	TD (%)	Yield (lb/a)	TSMK (%)	Seed (no./lb)	Value ($/a)
Runner Types:						
GA 982508	6.5 j*	15.4 l	4723 a	75 a	726 def	1522 a
GA 942511	10.1 hi	19.6 kl	4560 ab	74 ab	665 gh	1450 ab
GA 962533	5.1 j	18.6 kl	4660 a	71 c	655 h	1437 ab
Georgia Green	8.1 ij	26.1 jk	4247 abc	74 abc	779 abc	1351 bc
Georgia Hi-O/L	14.1 fg	32.1 hij	4090 bcd	72 bc	576 i	1252 cd
C-99R	17.6 e	30.3 ij	3926 cde	73 abc	675 fgh	1240 cd
AgraTech 201	12.8 gh	39.9 d-h	3763 cde	73 abc	704 e-h	1183 de
Southern Runner	16.9 ef	33.7 g-j	3674 def	71 c	803 ab	1134 def
Florida MDR 98	21.7 bc	38.0 e-i	3604 def	73 abc	668 gh	1134 def
GK-7 High Oleic	19.2 cde	47.4 cd	3627 def	72 bc	689 e-h	1132 def
GA 962540	6.6 j	19.2 kl	3520 efg	73 abc	763 bcd	1114 def
Georgia Bold	16.5 ef	45.2 cde	3461 e-h	73 abc	708 efg	1092 def
ViruGard	17.1 ef	36.5 f-i	3413 e-h	68 de	658 gh	1023 e-h
AgraTech 1-1	21.1 bcd	50.1 bc	3412 e-h	67 de	825 a	994 fgh
Andru 93	22.1 bc	57.0 ab	2966 h	66 de	735 cde	870 hi
Tamrun 98	16.6 ef	58.3 a	2407 i	68 de	724 def	703 ij
COAN	18.0 de	59.6 a	2194 i	68 de	800 ab	662 j
Virginia Types:						
GA 942516	8.1 ij	19.0 kl	4507 ab	74 a	592 i	1512 ab
Gregory	16.5 ef	30.3 ij	3672 def	67 de	462 k	1094 def
VA-C 92R	18.0 de	43.0 c-f	3432 e-h	69 d	493 jk	1054 efg
NC 12C	22.9 b	40.4 d-g	3408 e-h	68 de	493 k	1036 e-h
NC-V 11	21.6 bc	42.2 c-f	3226 fgh	68 de	504 jk	984 fgh
VA 98R	17.6 e	42.8 c-f	3023 gh	67 de	545 ij	900 gh
NC 7	28.9 a	61.7 a	2395 i	66 e	514 jk	710 ij

*Within columns, means followed by the same letter are not significantly different at P≤0.05.

APPLICATION FOR APPROVAL OF _X_ CULTIVARS ____ ASSOCIATE CULTIVARS
(Please check appropriate type of application)

1. Crop: **Peanut (Arachis hypogaea L.)**

2. Experimental no. or name: **GA 942511**

3. Pedigree and history: **GA 942511 was developed from a cross made in 1989 between PI 203395 x Georgia Browne. Sequential selection was practiced within the early segregating populations. Yield tests have been conducted for the past four years (1997-00).**

4. Description: **GA 942511 is being proposed for release as a new runner-type peanut cultivar to lower production cost in the southeast US. It has spreading runner growth habit, multiple pest resistance, and later maturity similar to Southern Runner, Florida MDR 98, and C-99R.**

5. Station(s) where developed: **Coastal Plain Experiment Station**

6. Participating scientist(s): **Wm. D. Branch**

Copy of the appropriate and adequate data comparing proposed release to standard cultivar must be attached to this form. ***Waller-Duncan's T-test (k-ratio = 100) was used for means separation in all tables (1-11).**

7. In what respect is the new cultivar superior to the cultivar now in use? Or reasons for proposing release as an associate cultivar:

   A. **During the past three years (1998-2000) and two-years (1999-2000) when grown using standard recommended pesticides (insecticides, fungicides, nematodes, and miticides) Tables 2 and 3, respectively, GA 942511 was found to be comparable to Georgia Green in tomato spotted wilt virus (TSWV) resistance, total sound mature kernel (TSMK) grade, and dollar value return per acre, but later in maturity by 2-3 weeks which would also be beneficial to spread out harvest.**

   B. **GA 942511 was found to be significantly higher in pod yield and dollar value when grown with or without pesticides as compared to other similar later-maturing check cultivars: Southern Runner, Florida MDR 98, and C-99R (Tables 1, 2, and 3).**

   C. **GA 942511 was found to have significanlty better leafspot and total disease resistance than other multiple-disease resistant runner cultivars (Tables 1,2, and 3)**

   D. **GA 942511 was found to have smaller pod size but larger percentage of jumbo runner seed than C-99R (Tables 4, 5, 6, 7, and 8).**

8. Method of propagation: **Seed**

9. Amount of breeder seed stocks available (if applicable): **10 lbs.**

10. Amount of foundation seed stocks available (if applicable): **100 lbs.**

11. Amount of cutting or bud material available for vegetatively propagated material for nursery distribution (if applicable): **n/a**

12. Is there likely to be unusual difficulty encountered in the production of any class of seed stocks: **None.**

13. Three suggested names for the cultivar: **Georgia-01R(preferred by the breeder), Georgia 2001R, Georgia Resistant.**

14. Name approved by plant cultivar and germplasm release committee:

28

15. Form of intellectual property protection: **Plant Variety Protection.**

16. Is a royalty assessment recommended: **Yes**.

RECOMMENDED BY:

A. Wm. D. Brown
Originating Scientist

B. _____
Department Head

C. _____
Chairperson, GAES Plant Cultivar and Germplasm Release Committee

D. _____
Resident Director
Appropriate Station

E. Jerry Cherry
Associate Dean for Research

F. _____

APPROVED:

Gale A. Buchanan 11-15-01
Dean and Director
College of Agricultural and Environmental Sciences

REGISTRATION OF 'GEORGIA-01R' PEANUT

'Georgia-01R' (Reg. no. CV_____, PI_____) is a new multiple pest resistant runner market type peanut (*Arachis hypogaea* L. subsp. *hypogaea* var. *hypogaea*) cultivar that was released by the Georgia Agricultural Experiment Stations in 2001. It was developed at the University of Georgia, Coastal Plain Experiment Station.

Georgia-01R was derived from a cross made in 1989 between PI 203395 and Georgia Browne (Branch, 1994). Sequential selection method (Branch *et al.* 1991) was practiced within the early segregating populations, and individual resistant plants were sequentially selected under heavy soilborne disease pressure, heavy leafspot disease pressure, and heavy tomato spotted wilt virus (TSWV) pressure without any fungicide and insecticide applications. Performance testing was begun in the $F_{4:6}$ generation with the advanced pure-line selection, GA 942511.

During three consecutive years 1997-99 when grown without any pesticides (Branch and Fletcher, 2001), Georgia-01R was found to have comparable or better resistance to early and late leafspots [*Cercospora arachidicola* Hori and *Cercosporidium personatum* (Berk. & Curt.) Deighton, respectively] and tomato spotted wilt virus (TSWV) as 'Southern Runner' (Gorbet *et al.*, 1987) and 'Florida MDR 98' (Gorbet and Shokes, 2002). Georgia-01R also produced significantly higher yields and dollar values without pesticides as compared to these other multiple resistant cultivars, and when grown with recommended pesticides, Georgia-01R was found to be comparable to 'Georgia Green' (Branch, 1996) in TSWV resistance, pod yield, total sound mature kernel grade, and dollar value return per hectare.

Georgia-01R has a spreading runner growth habit, tan testa color, and later maturity similar to Southern Runner, Florida MDR 98, and 'C-99R' (Gorbet and Shokes, 2001). Georgia-01R also has dark green foliage, prominent mainstem, and alternate branching pattern.

Maturity is approximately two to three weeks later for Georgia-01R compared to Georgia Green in south Georgia. Georgia-01R also has a greater pod bulk density, more pronounced pod reticulation and constriction, greater percentage of jumbo runner seed size, slightly lower oil content, and slightly higher oleic to linoleic fatty acid ratio than C-99R. However, it is not significantly different from C-99R in number of sound mature seed count, blanchability, protein content, and roasted peanut flavor scores.

U. S. plant variety protection is pending for Georgia-01R. Breeder seed of Georgia-01R will be maintained by the University of Georgia, Coastal Plain Experiment Station at Tifton. Foundation seed stock will be available from the Georgia Seed Development Commission, 2420 S. Milledge Avenue, Athens, Georgia 30605.

W. D. Branch *


GA 942511
FLORIDA
MDR 98

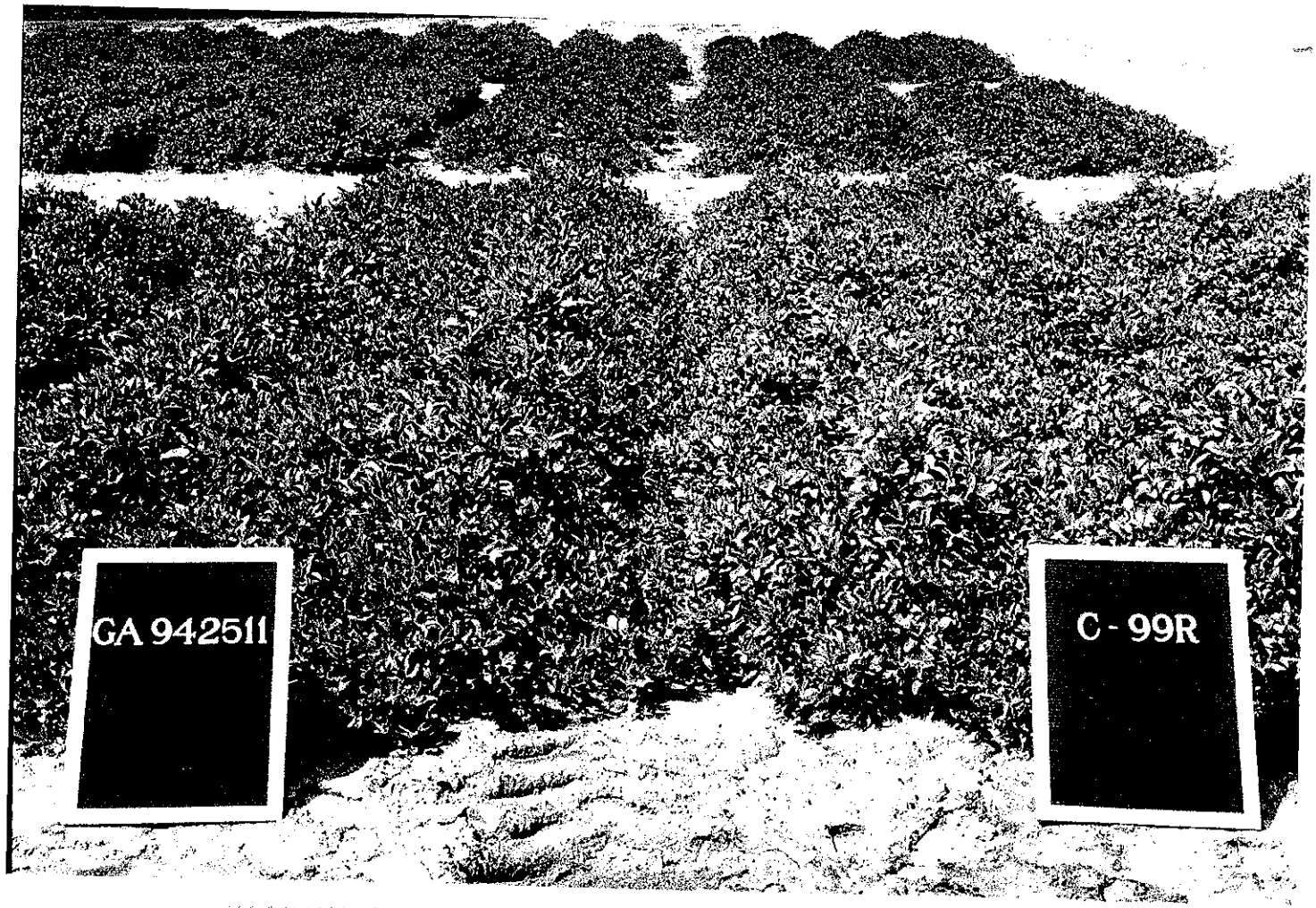
GA 942511
C - 99R

EXHIBIT - E

UNIVERSITY OF GEORGIA RESEARCH FOUNDATION, INC.
STATEMENT OF APPLICANT'S OWNERSHIP

The variety for which plant variety protection is hereby sought was developed by William D. Branch, an employee at the University of Georgia Agricultural Experiment Station. The Georgia Agricultural Experiment Station is a part of The University of Georgia. The University of Georgia is one of the universities in the University System of Georgia. The Board of Regents of the University System of Georgia ("Board of Regents") is a body that was created by the Constitution of the State of Georgia and is charged with the responsibility of operating the universities in the University System of Georgia. The University of Georgia Research Foundation, Inc. is a Georgia nonprofit corporation which was incorporated to, among other things, own and exploit intellectual property developed or created at The University of Georgia. One June 9, 1982, the Board of Regents approved a Patent Policy regarding inventions and discoveries by persons employed at the University of Georgia. As an employee at the Georgia Agricultural Experiment Station, William D. Branch is subject to said Patent Policy. Rights in novel plant varieties developed at the University of Georgia, including Georgia-01R, are covered by said Patent Policy. By agreement, the Board of Regents assigned to the University of Georgia Research Foundation, Inc. all rights in intellectual property covered by said Patent Policy. This agreement applies to then existing intellectual property and to intellectual property which was developed thereafter.

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U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE

EXHIBIT E
STATEMENT OF THE BASIS OF OWNERSHIP

Application is required in order to determine if a plant variety protection certificate is to be issued *(7 U.S.C. 2421)*. The information is held confidential until the certificate is issued *(7 U.S.C. 2426)*.

1. NAME OF APPLICANT(S)	2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER	3. VARIETY NAME
iiversity of Georgia Research Foundation, Inc.	GA 942511	Georgia-01R
4. ADDRESS *(Street and No., or R.F.D. No., City, State, and ZIP, and Country)*	**5. TELEPHONE** *(Include area code)*	**6. FAX** *(Include area code)*
Boyd Graduate Studies Research Center Athens, GA 30602-7411	706-542-5944	706-542-3837
	7. PVPO NUMBER	

8. Does the applicant own all rights to the variety? Mark an "X" in the appropriate block. **If no, please explain** [X] YES [ ]

9. Is the applicant (individual or company) a U.S. National or a U.S. based company? **If no, give name of country** [X] YES [ ] NO

10. Is the applicant the original owner? [ ] YES [X] NO **If no, please answer one of the following:**

a. If the original rights to variety were owned by individual(s), is (are) the original owner(s) a U.S. National(s)?

[X] YES [ ] NO **If no, give name of country**

b. If the original rights to variety were owned by a company(ies), is (are) the original owner(s) a U.S. based company?

[ ] YES [ ] NO **If no, give name of country**

11. Additional explanation on ownership *(If needed, use the reverse for extra space)*:

See attached Exhibit E Statement.

PLEASE NOTE:

Plant variety protection can only be afforded to the owners (not licensees) who meet the following criteria:

1. If the rights to the variety are owned by the original breeder, that person must be a U.S. national, national of a UPOV member country, or national of a country which affords similar protection to nationals of the U.S. for the same genus and species.
2. If the rights to the variety are owned by the company which employed the original breeder(s), the company must be U.S. based, owned by nationals of a UPOV member country, or owned by nationals of a country which affords similar protection to nationals of the U.S. for the same genus and species.
3. If the applicant is an owner who is not the original owner, both the original owner and the applicant must meet one of the above criteria.

The original breeder/owner may be the individual or company who directed the final breeding. See Section 41(a)(2) of the Plant Variety Protection Act for definitions.